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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/548,511	04/13/2000	Jose P Arencibia JR.	ECG-100US	6778

7590 10/19/2004
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EXAMINER

RIDLEY, BASIA ANNA

ART UNIT PAPER NUMBER

1764

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/548,511

Applicant(s)

ARENCIBIA, JOSE P

Examiner

Basia Ridley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004 & 6 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) 6-20 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4 and 5 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

QUAYLE ACTION

1. The finality of the Office action mailed on 15 January 2004 is hereby withdrawn in view of the arguments presented in the appeal brief filed on 6 August 2004.

2. In view of withdrawal of finality of the Office action, the amendment filed on 22 March 2004 has been re-considered and has not been entered because it is not clear. The reasons for holding said amendment not clear are the same as the reasons set forth in the advisory Office action mailed on 1 April 2004.

3. This application is in condition for allowance except for the following formal matters:

a. Claims 6-20, drawn to an invention non-elected with traverse in the reply filed on 2 May 2003, are present in the application. Applicant is requested to cancel the noted claims or take other appropriate action (37 CFR 1.144). Failure to take action during time period set below will be treated as authorization to cancel the noted claims by Examiner's Amendment and pass the case to issue. Regarding applicant's arguments presented in the brief and relating to the restriction requirement under 35 U.S.C. 121, it is noted that since the restriction was made Final in a prior Office action, no further response by the examiner is deemed necessary. Further it is noted that this issue relates to petitionable subject matter under 37 CFR 1.144 and 37 CFR 1.181 and not to appealable subject matter. See MPEP § 1002 and § 1201.

b. The specification and the drawings are replete with errors. A substitute specification, including the drawings but excluding the claims, is required pursuant to 37 CFR 1.125(a). While the objections are too numerous to be pointed out specifically, examples of such instances were listed in the Office action mailed on 15 January 2004.

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Applicant is requested to review the disclosure and correct all errors of which applicant becomes aware.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed

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of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213, except for consideration of the above matters.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

4. The following is an examiner's statement of reasons for allowance:

The claim combination wherein the reaction vessel comprises a temperature controlling helical coil fixed to an outer surface of a wall of said reaction vessel, at least one isothermal mixing baffle disposed within said reaction vessel, a phase separator in fluid communication with said baffle so that only one saturated or sub-cooled liquid phase of a heat transfer working fluid enters said isothermal mixing baffle and means to combine vapor from said phase separator and vapor from said isothermal mixing baffle and introduce said vapor into said helical channel is allowable over the prior art of record. While reaction vessels using combinations of isothermal mixing baffles within the reaction vessel and temperature controlling jacket/helical coil fixed to an outer surface of a wall of said reaction vessel are known (see Uno et al. (USP 5,131,232, Fig. 1) and Chemical Engineering Progress (June 1999, pages 62-68)) and while it is known to separate vapor and liquid phases leaving an isothermal mixing baffle, located in a reaction vessel, in a phase separator and to pass said separated liquid back to the isothermal mixing baffle while recovering said separated vapor for further use as a heating fluid or in power generation (see Ohsaki et al. (USP 4,321,234, C4/L57-C5/L18 & C16/L18-C17/L4), one of

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ordinary skill in the art at the time of the invention would not be motivated to use means to combine vapor from said phase separator and vapor from said isothermal mixing baffle and to introduce said vapor into said helical channel.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Basia Ridley, whose telephone number is (571) 272-1453.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on (571) 272-1444.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Technical Center 1700 General Information Telephone No. is (571) 272-1700. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Basia Ridley 
Examiner
Art Unit 1764

BR
October 15, 2004


Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700